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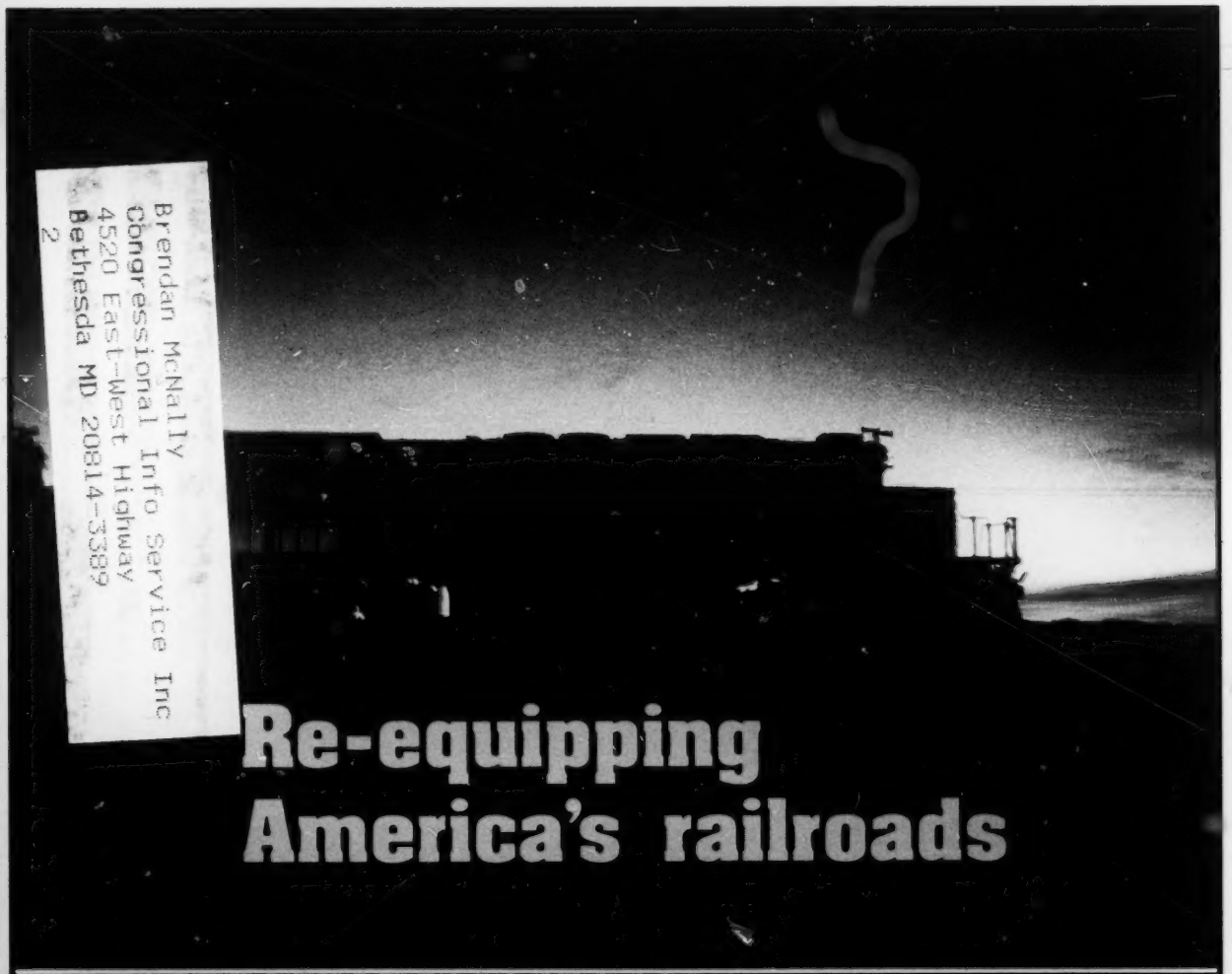
Railway Age

...for the new age of railways and rail transit



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CP Rail breaks a bottleneck

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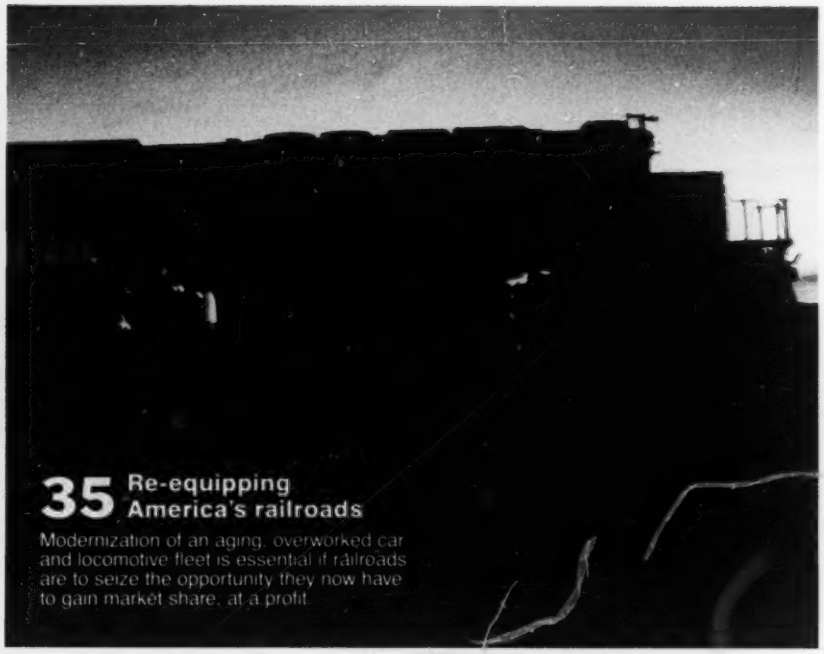

35 Re-equipping America's railroads

Modernization of an aging, overworked car and locomotive fleet is essential if railroads are to seize the opportunity they now have to gain market share, at a profit.

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61 CP Rail breaks a transcontinental bottleneck

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A proposed 18-mile line would utilize existing Norfolk Southern right-of-way, now freight-only but once a busy passenger rail route.

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Market Outlook

Equipment

Ministry of Railways, India: Awarded a contract to the Controls and Composition Division of Harris Corp., Melbourne, Fla., for locomotive control and monitor (Locotrol II) systems to be installed on the South Eastern Railroad and the North Eastern Frontier Railroad.

Trailer Train: Will acquire 500 new auto rack flatcars at a cost of $24 million. Bids were being solicited from five manufacturers with delivery of the first cars expected to take place in January 1989. Also approved: The purchase of 20 articulated, five-platform container cars at a cost of $2.1 million; and the acquisition of a railcar repair facility in Drayton, Mich., which, with improvements, will cost $4.5 million.

Facilities

Ankara (Turkey): Is negotiating with UTDC Inc., a subsidiary of Lavalin Industries, for the turnkey supply of a heavy rail rapid transit system. In partnership with two Turkish manufacturing and construction companies, Gama and Guris, UTDC will provide all project management, system design, system engineering, equipment procurement, and vehicle supply for the $510 million (Canadian) project. UTDC will supply 108 vehicles similar to the new H6 type subway cars currently being supplied to the Toronto Transit Commission.

Conrail: Is spending $3.5 million to increase overhead clearances on 12 bridges between Chicago and Toledo. When the project is completed, Conrail will have an overhead clearance of 20 feet, 6 inches on its Chicago-Columbus line, permitting double-stack trains with high capacity containers to use the route.

Dakota, Minnesota & Eastern: As part of a $6.3-million program to upgrade 165 miles of main line between Owatonna, Minn., and the South Dakota state line, will install 130,000 new ties, 116,000 tons of rock ballast, and five miles of cwr.

Itel Rail: Will build a $4.5-million freight-car maintenance facility at Dothan, Ala., on the Hartford & Slocomb and with connections to CSXT, Norfolk Southern and Atlanta & St. Andrews Bay. The complex will consist of three buildings, a 60,000-square foot main erection and repair building, equipped with two 15-ton overhead cranes, a 10,000-square foot component-fabrication building and a 25,000-square foot paint shop.

Santa Fe: Will spend $11 million to improve its Belen, N.M., yard and related facilities. The program calls for a new yard office building, a new bridge, modified and new locomotive fueling facilities, major track reconfiguration work, and addition of a third main line track.

Revenue freight carloadings

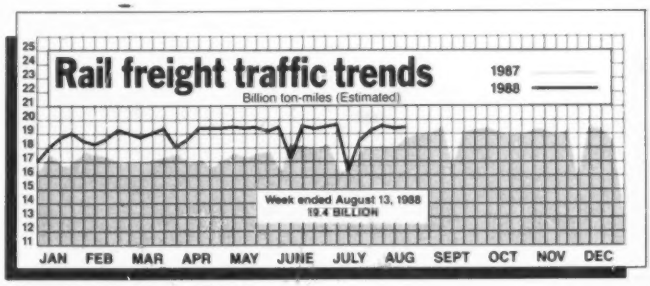
Commodity	August 13 week	August 6 week	July 30 week	July 23 week
Grain	27,087	29,203	28,629	30,548
Other farm products	2,548	2,452	2,486	3,283
Metallic ores	20,584	19,393	20,842	22,337
Coal	128,781	124,460	126,128	119,758
Crushed stone, gravel and sand	19,011	18,882	19,240	18,677
Nonmetallic minerals	10,954	10,953	11,459	10,238
Grain mill products	10,224	10,498	10,764	10,569
Food and kindred products	10,925	10,986	11,510	11,295
Primary forest products	9,833	9,538	9,581	9,869
Lumber and wood products except furniture	6,726	6,473	7,922	7,258
Pulp, paper and allied products	12,060	12,008	12,296	11,976
Chemicals and allied products	27,657	27,605	27,243	26,246
Petroleum products	5,500	5,506	4,884	5,174
Stone, clay and glass products	11,356	11,446	11,723	11,596
Coke	5,678	6,027	6,350	5,726
Metals and products	9,567	10,346	11,068	10,426
Motor vehicles and equipment	16,133	15,439	15,234	14,150
Waste and scrap materials	9,589	9,545	9,957	9,538
Forwarder and shipper assn. traffic	2,399	2,548	2,672	2,373
All other carloads	83,210	82,477	84,077	83,164
Total Cars Loaded	**430,222**	**425,785**	**434,065**	**424,221**
% change from previous year	1.7	5.0	5.0	3.4
Estimated revenue ton-miles (billions)	19.4	19.3	19.5	19.1
% change from previous year	2.2	5.5	5.9	4.6

Total:	**1988**	**1987**	**% change**
32 weeks	608.2	565.5	7.6

Piggyback loadings

	August 6 week	July 30 week	July 23 week	July 16 week
Trailers/containers	113,024	113,119	111,191	110,766

Cumulative total, 31 weeks		**% change from 1987**
Trailers/containers	3,366,388	5.5



Source: Association of American Railroads

Southern California Rapid Transit District: Has contracted with Booz Allen & Hamilton for an additional $2 million of consulting services, bringing to $8.4 million the value of systems engineering and analysis support covered in SCRTD's contract with the consultant. Of the additional $2 million, $1.8 million is for continuing services on the first segment of SCRTD's Metro Rail subway, and $200,000 is for the second segment.

Re-equipping America's railroads

The car and locomotive fleet is creaking with age; much of it is obsolete; nearly all of it is overworked. The time for re-equipping this fleet is now; and the need is urgent.

By GUS WELTY,
Senior Editor

The time has come for railroads, transportation customers, government, financial institutions and railway suppliers to think hard about transportation, rail transportation, for the year 2000.

There is a massive task looming out there in the next decade or so.

It's called re-equipping America's railroads.

It's a challenge that will have to be met.

It's a job that will have to be done.

It will cost billions of dollars.

It will be money well spent, well invested. It will produce gratifying returns for those who spend, those who invest—and for a nation that depends upon transportation to bind it together, to make commerce work, domestically and internationally.

Why should railroads "think hard"?

Railroads have a tremendous opportunity to gain market share and to do so profitably. The routes are in place, the plant is in place, and it's in better condition than it has ever been. In contrast, much of the Interstate Highway System is in disrepair and lesser but still major highways are in worse shape. The drought of '88 has demonstrated beyond any doubt that dependence upon the inland waterways system is dependence ill-placed.

There were 17 carbuilders at the top of the market; five survive, including Gunderson (pictured). They have the capacity to meet foreseeable needs, but turning capacity into capability may not be easy.

Now and over the next few years, railroads will have more technological advances at their beck-and-call than at any time since dieselization or the introduction of the computer.

• The equipment gap. The weak link is equipment, motive power and freight cars. Much of what's out there is not just old; it's inefficient and it doesn't meet the needs of today's—or tomorrow's—customers. Locomotive manufacturers can provide diesel-electrics with higher horsepower, greater tractive effort and improved fuel efficiency. Locomotive manufacturers are ready with new financing and maintenance packages. But the response has been slow. The newest, most productive units—General Electric's DASH 8 locomotives and General Motors' 60 Series—account for just a small percentage of the fleet today. To put it another way, the locomotive fleet includes more units built before 1965 than it does units built since 1980.

The picture on the freight-car fleet is a little different. About one-fourth of the cars in service, railroad-owned, are 10 years old or under—but that total includes a lot of boxcars built in the incentive-per-diem days when a railcar was a good tax shelter, regardless of anything else. More than 30% of rail-owned freight cars today are in the 20-years-and-up age

group. And with the changes that have taken place in just the past decade in traffic demand, traffic mix, this is a part of the fleet that begs for replacement.

What about transportation customers, "thinking hard"?

Customers, owners or lessors of cars, have become major providers of equipment—but many of them are not happy about the considerations they get in return for providing cars to the fleet.

In the time since partial deregulation, since passage of the Staggers Rail Act in 1980, the total car fleet has gone down from about 1.7 million units to about 1.4 million. Car capacity has gone up, to be sure, and cars are making more trips per year, moving a higher percentage of the time under load. But U.S. Class 1 railroad ownership of freight cars has dropped from more than 1.1 million at the start of 1981 to well under 800,000 today. Even if you take into account the reduction in the number of Class 1 railroads and the development of car-owning regional railroads, this is a significant reduction.

What it's going to mean for the future is that customers—especially those for very specialized equipment—may have to play an increasing role in supplying that equipment. But this will only happen, and railroads will only get the traffic, if the terms are right. With few exceptions, railroads do not seem to be in a mood, philosophically or financially, to go for investment in equipment that does not have a payback that's almost guaranteed, which sometimes means equipment locked into long-term shipper contracts.

Government's role in "thinking hard"?

Government's role is not a small one, and it could become a major one.

The present Administration has been pro-deregulation and the Congress, after long consideration, has as yet taken no action to do a rollback on the Staggers Act, no matter how hard the electric utilities and coal interests have tried to get it to do just that.

But next year there will come a new Administration, a new Congress—and, no matter who's in control, new pressures for reregulation. The proponents, outside and inside government, will still be there. Only the November elections will determine whether there are enough opponents left in influential positions to prevent a rollback to the pre-Staggers days when much of the rail industry was in bankruptcy court and the rest of it wasn't much better off.

Then, financial institutions, and the "hard-think."

• **Leaning toward leasing.** If there is one word that's heard today, in terms of equipment acquisition—by railroads, users, anybody—the word is "lease."

Many years ago, this was a word that wasn't mentioned in polite circles in the railroad business. If a Santa Fe wanted power or cars, for example, it paid its money down and bought. The former Pennsylvania Railroad was unhappy when word got out that it was leasing locomotives.

But today, lease is the word, whether it is a direct one or one that might appear to the builder as a sale.

It's only a guess, but it's probably a good one, that especially in the intermodal area, equipment that's acquired will increasingly be equipment that's leased, where railroads are concerned. As one example, Santa Fe leased double-stack intermodal equipment last year, and it leased a large number of container wells this year. The main reason: Volatility, or the fear of it, in intermodal equipment, with the possibility that equipment acquired today could be out of favor in a relatively short time, certainly in fewer years than what's ordinarily regarded as the life of a railcar.

A major carbuilder notes what's happening. It used to be, this builder says, that leasing was occasionally mentioned—but now, it's an option that is involved in just about every deal.

Finally, there are the railway suppliers, the carbuilders and the manufacturers of components, who are giving things the "hard-think." And with good reason.

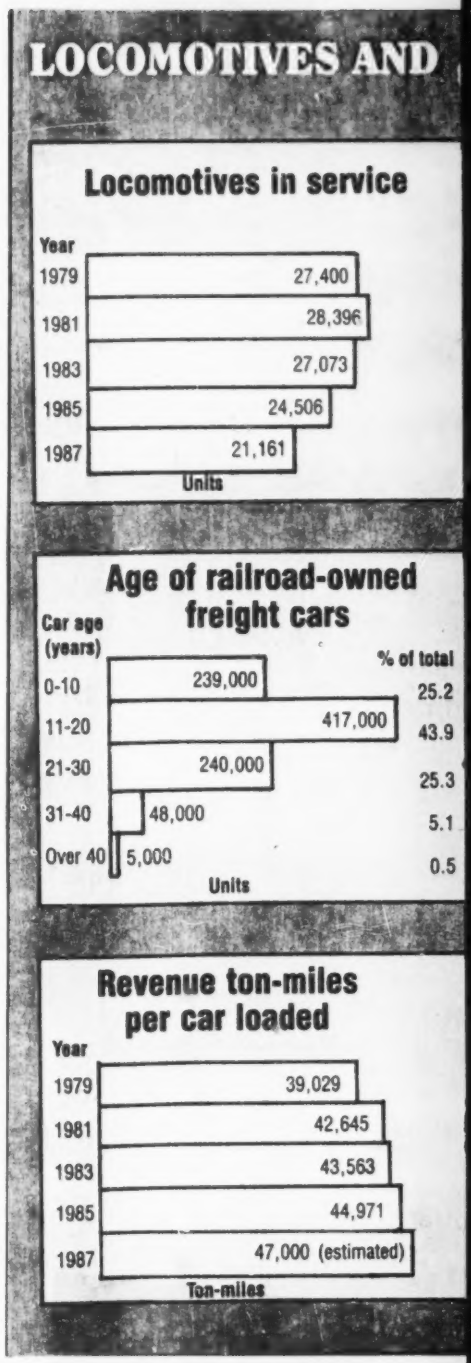
Back in the late 1970s, when the market couldn't absorb new equipment fast enough, suppliers expanded capacity, built new plants, hired new people.

Then the bottom dropped out.

The nation went into recession. In 1979, more than 95,000 new freight cars were put into service. Four years later, fewer than 6,000 new cars were delivered. In 1979, more than 1,700 new locomotive units went to work. In 1983, builders delivered fewer than 200.

Railroads, with ton-mile totals that went from 913 billion in '79 to 828 billion in '83, made-do with what they had—inefficient as it might have been, unresponsive to customer need as it might have been—because there was little choice.

By one count, there were 17 manufacturers of freight cars at the top of the market. Today, there are five, one of which is only in the tank-car business. A survivor, at another builder, remembers: At the top, he recalls, "We had about 1,900 people working here. We shut down for 18 months. During that time, we had seven people working."

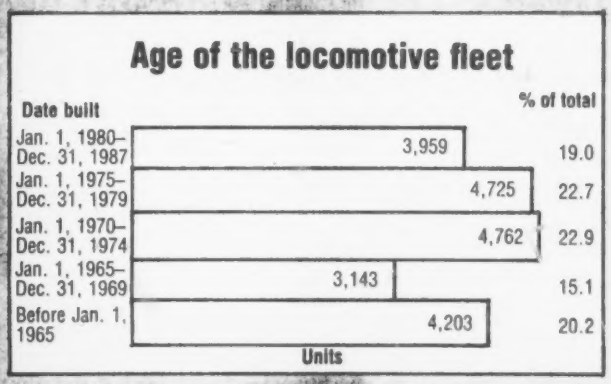


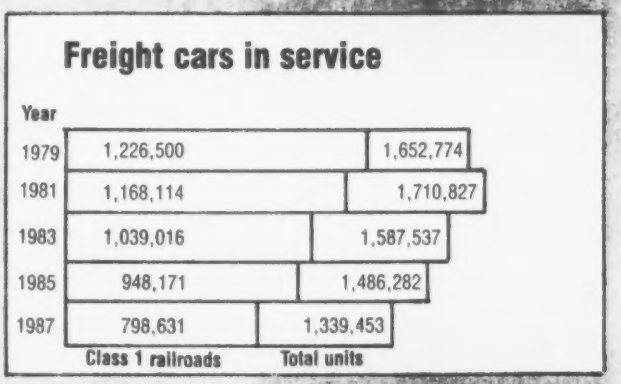
Component suppliers had similar problems. Some simply got out of the market. Others closed plants. In a few cases, new plants—built to take advantage of the boom—never opened, or at least not until now.

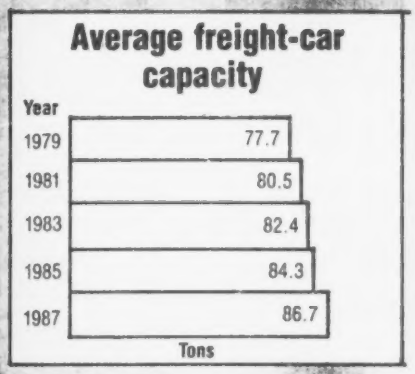
And, what about "now"?

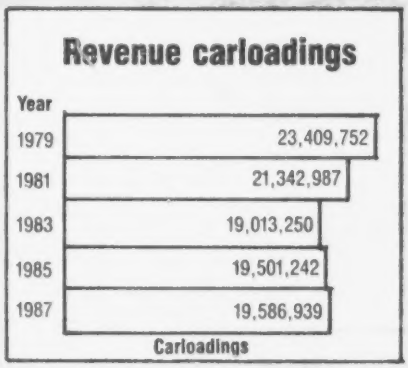
Now, the carbuilders and component suppliers who participate in the semi-annual forecast surveys made by the Amer-

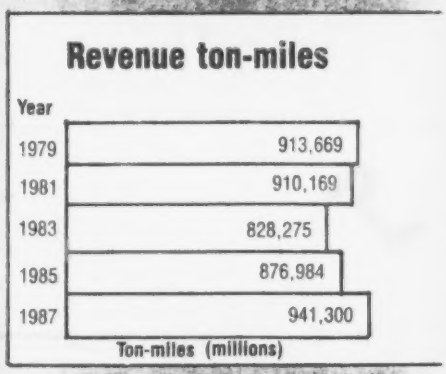
FREIGHT CARS: A shrinking, aging fleet works harder

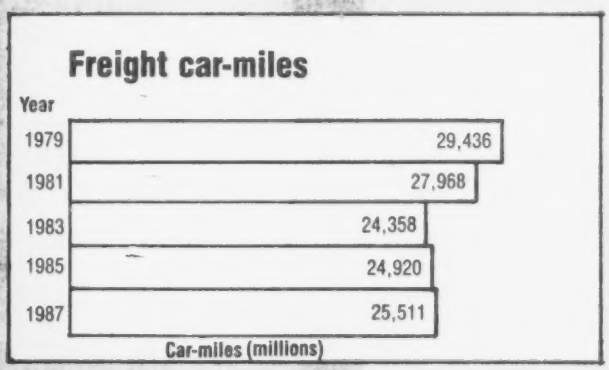


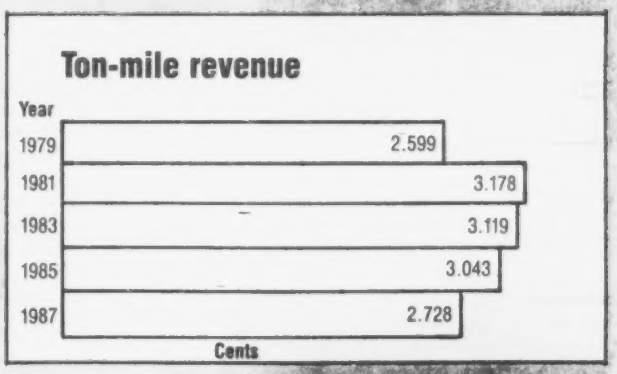












ican Railway Car Institute are optimistic—in a very cautious fashion.

Their projections of orders and deliveries—demand and production—have been going up, but slowly and carefully.

And they, above all people, have knowledge about what's possible—something that railroads and other buyers/lessors of railcar equipment may not have looked at closely enough.

Today, there are some estimates that railcar construction capacity is about 45,000 cars a year. That's low, so far as "capacity" is concerned. A more realistic figure would be in the range well above 50,000 and close to 60,000, or more than twice what the ARCI forecasts project, for near-term orders or deliveries.

But capacity and capability are two different things.

Capability is probably no more than half to two-thirds of capacity, and that brings potential production down to levels closer to what the projections are.

Labor supply is a problem. So is engineering and production management expertise. So is material and component supply, with leadtimes stretching out on steel and on some of the other basics that go into a freight car—such as axles.

It's one thing to have just two domestic suppliers of locomotives. It's something else to have just two suppliers of railcar axles, but that's the situation. And, while the capacity of these suppliers can be figured at about 35,000 carsets per year, there are fears now that the humble axle may be the first major component to come up short (with at least one builder going to Canada for a supply but with producers in Japan, Brazil, Europe, not showing much interest).

But, what are domestic suppliers to do? Hire more people, and open themselves to the obligations that this sometimes involves under union agreements? Re-open old plants or build new ones? Spend hundreds of thousands of dollars more on research-and-development that didn't pay off when similar sums were spent in the past?

If you want a true love/hate relationship, it's the relationship between railroads and suppliers—and, frankly, each group has taken advantage of the other in times past, each gouging when it was to its advantage.

So, what happens next?

For some insight into that, consider what's happening now.

• **Conflicting signals.** Nobody can have a serious complaint about rail traffic levels. Through the first seven months of 1988, carloadings were up by almost 6% from '87 levels and by 11.5% from '86 totals. Ton-mile figures were even more impressive, showing a gain of 7.8% from 1987 and of 13.9% from '86. Loadings were up in 14 of the 20 major commodity categories reported by the Association of American Railroads. In the first half of '88, railroads set a new record for grain movement. Coal loadings have been on the rise, with recent forecasts pointing to continued increases in mining activity.

—Profit margins, however, continue to be tight, even with what some see as an easing of the rate compression that has put the squeeze on margins.

—Even though there's a need for re-equipping motive power and freight car fleets, and even though equipment technology is superior to what was available a decade ago, power and cars are in competition with other technologies that may provide a quicker and greater return on investment—technologies ranging from flange lubrication systems to advanced train control systems.

—Orders for new freight cars in first-half 1988 almost doubled the total for first-half '87, 16,471 vs 8,640. At the same time, carbuilders and component suppliers are also seeing substantial increases in demand stemming from car-rebuilding programs.

—During the long depression in the equipment market, tank cars and other specialty cars accounted for most of the small amount of business there was. Now, carbuilders are looking at a redevelopment of interest in the more-standard car types, including covered hopper cars, open-top equipment and gondolas (for other-than-coal service). CSX has placed the major orders announced thus far, for 2,000 100-ton coal gondolas from Bethlehem Steel and 2,000 covered hopper cars from Trinity Industries. But the inquiry-file also points to possibly-substantial orders from other railroads coming along.

—Competition for available money seems to be indicating that railroads will be acquiring cars only where demand is guaranteed, and this means involvement with long-term contracts. At the same time, there is the always-thorny issue of car-hire,

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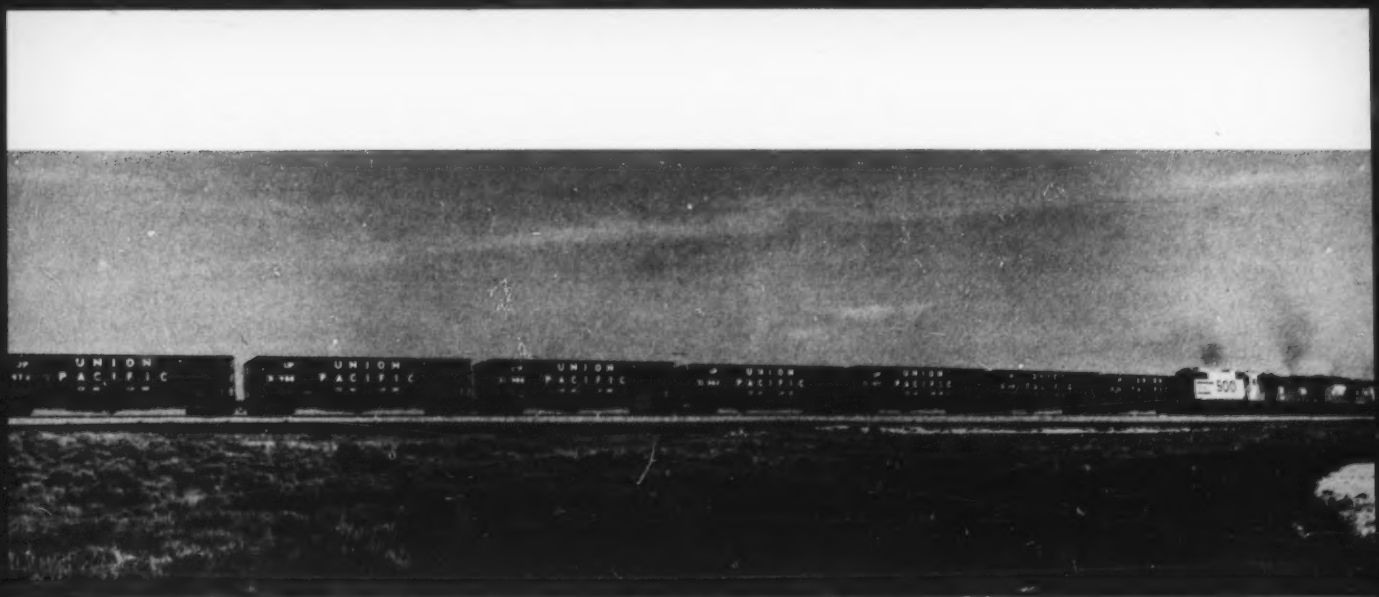

Heavy Axle Load (HAL) tests which began last month at Pueblo, Col., will help determine whether 125-ton freight cars will have a place on tomorrow's railroads.

and at least one major railroad, Conrail, is convinced that it will be shippers and leasing companies, not the carriers themselves, that will be the main advocates of free-market car-hire over the next few years—in large part because of the developing tightness in car supply in which the short-term value of cars will exceed the prescribed car-hire rates.

—Intermodal equipment continues to be the most volatile of equipment markets, not particularly because of the challenge to Trailer Train's antitrust immunity put by the U.S. Department of Justice, the Greenbrier Companies and a few others, but more because the dimensions of the business are changing and will probably continue to change. The articulated double-stack well car has been the wave-of-the-'80s. Containers now account for 40% of all intermodal traffic, as Trailer Train points out, with more than half of those containers moving in double-stack operations and, at this point, with interbox-connector equipment gaining an edge over bulkhead equipment, especially with development of 125-ton capacity equipment by Trinity, Thrall Car and Gunderson. But, for one reason or another, those cars can't now be loaded to full capacity on a number of routes. And there continues to be strong demand for single-level trailer/container cars, the articulated spine and Impack-type cars that have recently been a big part of Bethlehem Steel's production. In the meantime, there has been a fast-moving evolution in well-car dimensions, from 40- to 45- to 48-foot wells. And, just recently, 53-foot containers have begun to appear at intermodal terminals.

—RoadRailer may well be the wild-card in carless technology for intermodal. Currently, four roads are using RoadRailer: CSX, Norfolk Southern, Union Pacific and Burlington Northern, with interline movements scheduled for 1988 startup. Planned product additions include 48- and 53-foot dry vans, a refrigerated van, a flatbed and specialty units known as ContainerRailer, DumpRailer and AutoRailer, as well as a trash hauler (though not the passenger-carrying bi-modal vehicle envisioned at one point).

—Testing, which began Aug. 11 at the Transportation Test Center at Pueblo, Colo., may go a long way toward determining whether freight cars of tomorrow will really break the 100-ton barrier, going up by 20% to 125-ton capacity. With a load of information on 100-ton cars already in the data base, researchers will be looking at what happens with 125-ton cars, in the Heavy Axle Load (HAL) 16-month test program. This is a $10-million effort, designed to measure the effect of heavier loadings on rail performance, crossties and fastening systems turnouts, ballast, subgrade, and mechanical components. On the mechanical side, HAL will be aimed at an assessment of wheel wear, 100-ton vs 125-ton, and at a comparison of the performance of frame-braced trucks and conventional three-piece trucks.

—Offshore purchase of motive power and freight cars remains as an option, but one with question marks attached. Years ago, Missouri Pacific bought cars from a builder in Mexico. More recently, Trailer Train placed two orders for single-axle intermodal cars with Hyundai of South Korea. Now, Transcisco Industries has plans to build about 1,000 cars a year from kits produced by Daewoo Corp. in South Korea. On the locomotive side, there are those who believe that demand for new power will outstrip the ability of General Electric and General Motors to produce it, and that railroads will of necessity look overseas. On the other hand, past experiments with imported power—diesel-hydraulic road units from Germany which were tested by Southern Pacific and Rio Grande and a diesel-hydraulic switching unit brought over from Rumania—were one-time ventures. And, while offshore purchases of transit cars and other passenger-carrying equipment are the norm today, people-moving is pretty much the same here and there, but there's a world of difference between U.S. rail freight operations and those that exist elsewhere in the world.

—Anybody interested in acquiring freight cars might be well advised to place his order now. The most recent forecast from members of the American Railway Car Institute looks toward orders for almost 22,000 new cars this year, for 26,400 cars next year and for 27,000 cars in 1990. Those numbers are all well within the capacity of the four general carbuilders, Trinity, Thrall, Bethlehem Steel and Gunderson, plus Union Tank Car. But the bare numbers may be misleading. One carbuilder, for example, has about one-third the number of people working today as it had in the 1979-80 boom years, and that company has serious concerns about the wisdom of hiring more skilled people even if it could find them. Another carbuilder notes that a year ago, a car could be delivered in about 75 days from the time an order was placed—but now, the leadtime might be 150 to 180 days. That manufacturer, somewhat fearful that suppliers of some key components are now running at close to 100% of capability, sees deliveries of 30,000 to 35,000 cars a year in the early 1990s—"but we couldn't do it in 1988."

Backlogs are indeed building. Bethelehem Steel, for instance, will be working through next March on the 2,000-car order from CSX, and its intermodal-car line keeps working steadily, with a new order coming as an old one nears completion. Depending upon which plant and what product you're talking about, Thrall Car has backlogs that go into 1989, some stretching beyond the first quarter. Trinity is fine-tuning the operations of its Freight Car Division's plants, the former Pullman Standard plant at Bessemer, Ala., the former Greenville Steel Car facility in Pennsylvania and the former Ortner plant in Ohio, to make the most efficient use of production facilities. And even as the new-car market grows, Bethlehem Steel and Gunderson in particular call attention to the rebuild demand.

—Even though there are one-fourth the number of carbuilders today than there were a decade or so ago, competition remains tough. Three out of the four general carbuilders, for example, suddenly came up with 125-ton articulated container well cars. And it is now only the most special of specialty cars where a buyer lacks builder-options in his buying decision.

• **How to pay?** But, in all discussions of re-equipping the railroads, sooner or later it all comes down to money.

Increasingly, leasing seems to be the option of choice, finance leases, operating leases, whatever, either directly or indirectly as, for instance, in the case of PLM International's use of equipment fund partnerships, the third of which (PLM Equipment Growth Fund III) was announced recently.

But perhaps the most intriguing aspect of alternative financing is in motive power, in the concept developed on BN and, for want of a better phrase, known as power-by-the-hour, the blue-and-white EMD units and the red-and-gray LMX General Electric units now running on the otherwise-green BN.

At RAILEXPO '88, GE will be talking about financing, including third-party leasing and a variety of its support services ranging from complete turnkey programs to a la carte services such as parts supply, service engineering, locomotive remanufacture and component rebuilding. EMD will be talking about the lease maintenance facility it's opening at North Kansas City and plans to have one of the power-by-the-hour units on exhibit; GE won't have an LMX unit there, but it will have two DASH 8s, a UP 40C and an SP 40B, both 4,000-hp units, while EMD also plans to display an a.c. unit. In addition, GE will have a diagnostic information display from a DASH 8 and portable personal computers for use in demonstrating DASH*STAR, a computerized system based on a mainframe unit at Erie, Pa., which can send specific requested information to railroad maintenance and repair personnel in the field because it can receive and store detailed lifetime operating logs on each DASH 8 unit in service.

This is million-dollar-plus stuff, these locomotives. And, under today's conditions and predicted circumstances, acquisition is hard to justify on grounds of fuel economy alone, good as it is. That's why there will also be exhibits at RAILEXPO from such companies as Rockwell International, whose seven-subsystem Advanced Railroad Electronics System (ARES) includes a locomotive analysis and reporting system and an energy management system, and Woodward Governor, with an analog control for use on yard switching units to provide better responsiveness to power-change demands through provision of more precise

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engine speed and load control, and displays of technology that will be used in its digital control systems now under development.

But, financing. Paying for re-equipping, and justifying the payment. Consider some of the things some people are thinking about.

• **Paying for power.** On the locomotive side, there are real concerns about the capital costs involved in acquisition of new power—which leads some to the belief that the industry may be on the verge of a surge in remanufacturing, some done internally as Santa Fe has done, but perhaps more done by the seven or eight outside companies most heavily involved in the business.

Under this scenario, a balance would be struck—new high-horsepower, advanced-control locomotives for main line operations, and remanufactured smaller units for terminal and secondary operations.

In its extensive remanufacturing program, Santa Fe has used equipment trust financing. As for acquisition of new power, it seems inevitable that leasing will play a bigger role, some of it traditional leasing but some of it involving power-by-the-hour full lease maintenance contracts with costs tied tightly to reliability and availability.

General Electric, for one, has strong views in this area, talking of a quantum jump which will require "creative new ways of supplying and managing motive power. That creativity has to come from a partnership between ourselves, the railroads and the financial community." As GE sees it, "Current approaches to owning, financing and leasing locomotives are the biggest roadblocks to an efficient marketplace for motive power. That is why the financial community has a big role in the partnership. Innovative financial tools are required."

What kind of financial tools? Well, GE asks, "Why not a financed pool of high-quality locomotives? Not only would this be a way to efficiently deploy motive power, it would also be a mechanism for dampening out wild swings in locomotive demand."

While railroads ponder those kinds of ideas, however, there's no doubt that many of them will be taking advantage of the remanufacturing and repowering services provided by such growing operations as Republic Locomotive Works, VMV Enterprises, Peaker Services, Caterpillar and, of course, Morrison-Knudsen, which has been remanufacturing locomotives since 1972 and is now starting a remanufacturing program for BN that could add up to 125 units.

But, while it's one thing for a railroad to contract for remanufacture of its own power, it's something else to go out and find power to acquire and remanufacture. The pool of available units is shrinking and prices are rising, although they apparently have not yet gone beyond the reasonable. As GATX Leasing assesses things, "Current prices in the range of $250,000 to $300,000 for the most popular 15-year old units are consistent with engineering and economic analyses of what these units should be worth."

• **Where the car market is.** Freight cars? Start with the premise that demand for tank cars will continue to hold up—in part, as Union Tank Car points out, because "The market for new tank cars is really a series of micro-markets for individual commodities." Tank cars are built for specific services, specific commodities, and so demand in one part of the market can't necessarily be satisfied by using excess cars that had been serving another market. In other words, you can't use excess sulphur cars to

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meet the growing needs of shippers of high fructose corn syrup. In addition, General American Transportation notes, the nature of the business in broad terms plays a part: "This fleet supplies the bulk liquid transportation needs of very important industrial segments, including chemicals, petroleum products and foods. Many of these products have no viable alternative means of transportation and distribution to the inland regions of the country. Thus, we see a continued strong demand for tank cars."

That phrase "continued strong demand" also applies to the intermodal market. Trailer Train, for example, continues to grow the fleet, especially for container service, although that growth in 1989 may be somewhat less than it will be in 1988. At the same time, the builders of intermodal cars are also apparently seeing new interest in car acquisitions by others.

As for other car types—coal gondolas and hopper cars, covered hopper cars, for example—they will follow the market, and in these cases the market may mean demand for electric power generation and federal government export policies regarding grain.

And as it happens, segments of the forest products industry may provide an example of market drive. Over the past two years, close to 3,000 center-partition bulkhead flat cars have been placed in service, bringing the total fleet to almost 5,000 cars. And, although total loadings in forest-product commodity categories have not increased, there are at least some indications that railroads are beginning to recapture some of the traffic that had been lost to motor carriers. And in an allied area, railroads are acquiring cars to service the paper industry—which means, among other things, that Gunderson will be building high-cube boxcars for the first time since 1979.

And somehow, the myriad questions about financing will be resolved. How? Probably in any number of ways, with specific packages tied to specific needs. Connell Finance, for instance, sees "more leasing, but more traditional leasing than a continued increase in operating leasing. Why? The 15-year lease of a unit of rolling stock is considerably less expensive than a five-year operating lease for the same item." Macdonald & Company, meanwhile, sees opportunity in both financing and re-financing. Financing for re-equipping the railroads is available, Macdonald says, "but the bigger challenge is to develop more efficient, lower-cost financings which place the various components of any financing in the hands of the entity best able to maximize the return or mitigate the risk of a given component." Re-financing? Tens of thousands of existing cars are subject to existing financings "which potentially can be restructured and renegotiated to assure railroads of continued availability of needed equipment, allow for planned maintenance and rebuild programs, and at the same time offer lessors a more predictable and less speculative return."

The manufacturers are ready. They are also cautious, determined to avoid the kind of herd-instinct that built up capacity in the late 1970s just in time to see the bottom fall out of the market in the early 1980s.

That practical, pragmatic stance was probably summed up best at the recent *Railway Age*/Irving Trust conference on re-equipping, in the view from Trinity's Freight Car Division: "The real question is not capacity, but how quickly can we turn on that capacity. We have concerns about safety, quality, cost containment. We won't expand too rapidly, and we won't expand without backlog." ■

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